

WHAT IS CLAIMED IS:

1. A system for Portable Document Format (PDF) document management, comprising:

5 a database operable to store reference information for a plurality of previously received PDF documents; and one or more software components collectively operable to:

receive a plurality of files from one or more external applications;

10 determine whether each received file is a PDF file;

extract key information from each received PDF file concerning a corresponding PDF document contained in the PDF file;

15 compare the extracted key information for each received PDF document with analogous reference information stored in the database for previously received PDF documents;

20 determine a verification status for each received PDF document according to the comparison and provide the verification status to the external application from which the PDF file was received, the verification status indicating that the received PDF document is a duplicate document if all the extracted key information for the received PDF document matches  
25 analogous reference information for a previously received PDF document, the verification status indicating that the received PDF document is an updated document if certain but not all the key extracted information for the  
30 received PDF document matches analogous reference information for a previously received PDF document, the verification status indicating that the received PDF

document is a new document if at least certain extracted key information for the received PDF document does not match analogous reference information for a previously received PDF document;

5           if the received PDF document is a duplicate document, return processing of the received PDF file to the external application from which it was received, without storing any extracted key information for the received PDF document in the database as reference  
10 information;

          if the received PDF document is an updated document, store certain extracted key information for the received PDF document in the database to update the reference information, and return processing of the  
15 received PDF file to the external application from which it was received; and

          if the received PDF document is a new document, store all extracted key information for the received PDF document in the database as reference information, and  
20 return processing of the received PDF file to the external application from which it was received.

2.   The system of Claim 1, wherein the one or more software components are operable to determine whether a  
25 received file is a PDF file according to whether the received file contains a PDF version number.

3.   The system of Claim 1, wherein the one or more software components are operable to extract at least some  
30 of the key information for the received PDF document from a header of the corresponding PDF file.

4. The system of Claim 1, wherein the extracted key information comprises one or more of title, subject, keyword, author, creator, producer, creation date, last modified date, number of pages, whether or not encrypted, and file size information.

5. The system of Claim 1, wherein the one or more software components are operable to record the verification status determined for each received PDF document.

6. The system of Claim 1, wherein the system is operable to perform PDF document management operations without use of ADOBE ACROBAT EXCHANGE OF ADOBE ACROBAT READER applications.

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7. A method of Portable Document Format (PDF) document management, comprising:

receiving a plurality of files from one or more external applications;

5 determining whether each received file is a PDF file;

extracting key information from each received PDF file concerning a corresponding PDF document contained in the PDF file;

10 comparing the extracted key information for each received PDF document with analogous reference information stored for a plurality of previously received PDF documents;

15 determining a verification status for each received PDF document according to the comparison and providing the verification status to the external application from which the PDF file was received, the verification status indicating that the received PDF document is a duplicate document if all the extracted key information for the received PDF document matches analogous reference information for a previously received PDF document, the verification status indicating that the received PDF document is an updated document if certain but not all the key extracted information for the received PDF document matches analogous reference information for a previously received PDF document, the verification status indicating that the received PDF document is a new document if at least certain extracted key information for the received PDF document does not match analogous reference information for a previously received PDF document;

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if the received PDF document is a duplicate document, returning processing of the received PDF file to the external application from which it was received, without storing any extracted key information for the received PDF document as reference information;

if the received PDF document is an updated document, storing certain extracted key information for the received PDF document to update the reference information, and returning processing of the received PDF file to the external application from which it was received; and

if the received PDF document is a new document, storing all extracted key information for the received PDF document as reference information, and returning processing of the received PDF file to the external application from which it was received.

8. The method of Claim 7, wherein determining whether a received file is a PDF file is based on whether the received file contains a PDF version number.

9. The method of Claim 7, wherein at least some of the key information for the received PDF document is extracted from a header of the corresponding PDF file.

10. The method of Claim 7, wherein the extracted key information comprises one or more of title, subject, keyword, author, creator, producer, creation date, last modified date, number of pages, whether or not encrypted, and file size information.

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12. The system of Claim 1, wherein PDF document management operations are performed without use of ADOBE ACROBAT EXCHANGE OF ADOBE ACROBAT READER applications.

13. Software for Portable Document Format (PDF) document management, the software being embodied in computer-readable media and when executed operable to:

receive a plurality of files from one or more external applications;

determine whether each received file is a PDF file;

extract key information from each received PDF file concerning a corresponding PDF document contained in the PDF file;

compare the extracted key information for each received PDF document with analogous reference information stored for a plurality of previously received PDF documents;

determine a verification status for each received PDF document according to the comparison and provide the verification status to the external application from which the PDF file was received, the verification status indicating that the received PDF document is a duplicate document if all the extracted key information for the received PDF document matches analogous reference information for a previously received PDF document, the verification status indicating that the received PDF document is an updated document if certain but not all the key extracted information for the received PDF document matches analogous reference information for a previously received PDF document, the verification status indicating that the received PDF document is a new document if at least certain extracted key information for the received PDF document does not match analogous reference information for a previously received PDF document;

if the received PDF document is a duplicate document, return processing of the received PDF file to the external application from which it was received, without storing any extracted key information for the received PDF document as reference information;

if the received PDF document is an updated document, store certain extracted key information for the received PDF document to update the reference information, and return processing of the received PDF file to the external application from which it was received; and

if the received PDF document is a new document, store all extracted key information for the received PDF document as reference information, and return processing of the received PDF file to the external application from which it was received.

14. The software of Claim 13, operable to determine whether a received file is a PDF file is based on whether the received file contains a PDF version number.

15. The software of Claim 13, operable to extract at least some of the key information for the received PDF document from a header of the corresponding PDF file.

16. The software of Claim 13, wherein the extracted key information comprises one or more of title, subject, keyword, author, creator, producer, creation date, last modified date, number of pages, whether or not encrypted, and file size information.



17. The software of Claim 13, operable to record the verification status determined for each received PDF document.

5           18. The software of Claim 13, operable to perform  
PDF document management operations without use of ADOBE  
ACROBAT EXCHANGE OF ADOBE ACROBAT READER applications.

19. A system for Portable Document Format (PDF) document management, comprising:

means for receiving a plurality of files from one or more external applications;

5 means for determining whether each received file is a PDF file;

means for extracting key information from each received PDF file concerning a corresponding PDF document contained in the PDF file;

10 means for comparing the extracted key information for each received PDF document with analogous reference information stored for a plurality of previously received PDF documents;

means for determining a verification status for each  
15 received PDF document according to the comparison and providing the verification status to the external application from which the PDF file was received, the verification status indicating that the received PDF document is a duplicate document if all the extracted key  
20 information for the received PDF document matches analogous reference information for a previously received PDF document, the verification status indicating that the received PDF document is an updated document if certain but not all the key extracted information for the  
25 received PDF document matches analogous reference information for a previously received PDF document, the verification status indicating that the received PDF document is a new document if at least certain extracted key information for the received PDF document does not  
30 match analogous reference information for a previously received PDF document;

means for, if the received PDF document is a duplicate document, returning processing of the received PDF file to the external application from which it was received, without storing any extracted key information for the received PDF document as reference information;

means for, if the received PDF document is an updated document, storing certain extracted key information for the received PDF document to update the reference information, and returning processing of the received PDF file to the external application from which it was received; and

means for, if the received PDF document is a new document, storing all extracted key information for the received PDF document as reference information, and returning processing of the received PDF file to the external application from which it was received.